

Automotive Engines Theory and Servicing 10th Edition

Chapter 25 – Cylinder Head and Valve Guide Service

Lesson Plan



CHAPTER SUMMARY:

1. Cylinder Heads, Intake and Exhaust Ports, and Cylinder Head Passages
 2. Cylinder Head Servicing, Cylinder Head Resurfacing, Intake Manifold Alignment, and Valve Guides
 3. Valve Guide Replacement
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OBJECTIVES:

1. Explain the design and construction of cylinder heads.
 2. Discuss intake and exhaust ports.
 3. Discuss cylinder head passages and cylinder head servicing.
 4. Explain aluminum cylinder head straightening, cylinder head resurfacing, and intake manifold alignment.
 5. Explain valve guides and the procedure for valve guide replacement.
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RESOURCES: ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Valve Guide Specifications and Measurement
 2. Chapter PowerPoint
 3. [Crossword Puzzle and Word Search \(A1\)](#)
 4. [Videos: \(A1\) Engine Repair](#)
 5. [Animations: \(A1\) Engine Repair](#)
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ACTIVITIES:

1. Task Sheet: Valve Guide Specifications and Measurement
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ASSIGNMENTS:

1. Chapter crossword and word search puzzles from the website.
 2. Complete end of chapter quiz from the textbook.
 3. Complete multiple choice and short answer quizzes downloaded from the website.
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CLASS DISCUSSION:

1. Review and group discussion chapter [Frequently Asked Questions](#) and [Tech Tips](#) sections.
 2. Review and group discussion of the five (5) chapter [Review Questions](#).
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NOTES AND EVALUATION:
